



FACT SHEET



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NATIONAL MISSILE DEFENSE MULTI-SERVICE LAUNCH SYSTEM

THE MULTI-SERVICE LAUNCH SYSTEM

The MSLS is a multirole space launch vehicle adaptable to a variety of missions. It is used in conjunction with the retired Air Force Minuteman II booster as a launch vehicle. The Minuteman rocket engines have been entirely refurbished to provide a reliable launch system.

The MSLS is designed to be adaptable to a variety of test scenarios, with interchangeable subsystems that allow it to simulate a variety of threats. Primary payloads and control systems are housed within the front section and shroud (FSS). This will house targets for intercept vehicles during NMD integrated flight tests.

The shroud provides for the structural equipment interface and environmental protection for the integrated systems. Lockheed Martin serves as the primary contractor. The MSLS can be used to launch lightweight targets and associated objects. These targets can be used to further examine interceptor targeting and tracking capability, by seeding the target zone with decoys in a further test on sensor capabilities. These targets and objects are ejected from modular launching tubes housed beneath the FSS. Each rack contains four launching tubes.

The MSLS Consists Of A Variety Of Subsystems Including:

Shroud
Separation Subsystem
Guidance, Navigation, and Control
Telemetry and Instrumentation Subsystem
Electrical Power and Distribution Subsystem
Attitude Control System
Airborne Range Safety Subsystem
Stage 3 Interface



SYSTEM OVERVIEW

The National Missile Defense (NMD) program currently underway within the Ballistic Missile Defense Organization (BMDO) is scheduled to conduct several Integrated Flight Tests (IFTs) to prove that an effective and affordable NMD system can be built. In IFTs, the BMDO utilizes the Air Force Multi-Service Launch System (MSLS) as a target launch vehicle during intercept tests. The MSLS was first successfully demonstrated in September 1996, and will be used for NMD tests until the contract expires.

As the NMD program progresses towards the end of its developmental stage, the MSLS will provide an important means to validate the hardware for any potential future NMD system. Through its ability to simulate a variety of incoming threats, the MSLS will allow the BMDO to determine the feasibility and effectiveness of the NMD system, thus providing the nation with the best possible ballistic missile defense while still adhering to valued international treaty commitments. The MSLS represents the effort by the military to make use of discontinued weapon system components for non-offensive research purposes.

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